

faces are then cut away with the bone nippers. Horse hair sutures have to be put into the skin only, and a small drainage-tube is left in the wound. A small splint is bandaged on, and all due antiseptic precautions having been taken, cure is completed in a fortnight, and the patient able to walk about.—*Le Progrès Medical*, Aug. 20, 1887.

LEONARD MARK (London.)

IV. On Arthrectomy of the Knee-Joint in Children. By DR. MANDRY (Tuebingen). The author calls attention to the various phases in the history of resection of the joints, their enthusiastic reception at the commencement of the antiseptic era in surgery, and their restriction in the tuberculous disease of joints, where it became apparent that complete eradication of the tissue was not always affected by these means. Moreover, in the knee-joint in children, typical resections were followed by serious defects in the growth and position of the joint, so that with this joint a typical resection is now almost universally acknowledged an unjustifiable operation. He advocates extirpation of the capsule and scraping out of any tuberculous foci, a practice which in seven cases at Tuebingen led to excellent results; in four of these cases healing per primam resulted; in two others with circumscribed suppuration, and in one case incision and scraping of the fistulous ducts had to be repeatedly resorted to. In one of the cases that had apparently healed per primam a tuberculous focus had unfortunately been overlooked, and resection became necessary later on. The operation is performed in the following way: Incision over and through the patella or the tendon of the quadriceps; extirpation of the entire capsule with forceps and scissors; thorough scraping in bone and soft parts of any tuberculous matter; no healthy cartilage or bone substance is removed; irrigation with sublimate-solution; suture of the quadriceps or patella with dropped catgut or sea-grass stitches; suture of the skin; Watson's splint; and finally Plaster-of-Paris bandage to counteract the tendency to flexion. If the latter should develop, forcible extension is practised, and a new Plaster of-Paris dressing applied. The final results after $2\frac{1}{2}$ — $3\frac{1}{2}$ years showed in one case almost normal mobility of the joint. Five times ankylosis (in

good position, 3 with slight flexion, and with flexion at a right angle). As to the length of the limbs we note: 3 times no difference between the diseased and healthy leg; in one case a slight shortening of diseased extremity, and twice an elongation of 1 and 1½ cm. respectively. The author has collected 63 further cases of Volkmann, König and others, and an analysis of these and his own brings him to the following conclusions: 10% died of diseases not connected with the operation; in 27% the operation was unsuccessful on account of recurrence of the disease, resulting in the establishment of fistulæ or necessitating resection or amputation; 63% were cured; and in three of these cases an elongation of the diseased extremity resulted, due to a decrease of the intra-articular tension after excision of the capsule and ligaments. Flexions of a slight degree are noted in 53% of the cases. Hoffa, some years ago, expressed the opinion that the shortening of the limb was not greater after resection than after conservative treatment, provided the operation was done in the epiphysis of the femur. Mandry, on the contrary, is of the opinion that even arthrectomy gives better results. On the other hand, the author acknowledges that after arthrectomy there exists a greater tendency to flexions (55%). The ideal result of such operations is a movable joint, (unattainable by typical resection), but then after the operation the limbs ought to be treated by electricity, active and passive movements, etc., instead of being put up in immobilizing dressings. The danger of a resulting flail-joint is considered very small by the author. Of the 44 cases that did well after the operation, 8 recovered with movable joints, and 6 of these with almost normal mobility. In conclusion he calls attention to the possibility of overlooking foci in the interior of the bones, which risk is, however, also run in resecting only very thin layers from the articulating surfaces, as advocated by the adherents of typical resection.—*Beitrage zur Klinischen Chirurgie. Mittheilungen aus der chirurg. Klinik zu Tuebingen.* Bd. iii, hft. 2.

FRED. KAMMERER (New York.)